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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,192

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Mark L. Buer

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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

PAPER NUMBER

2137

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/728,192	Applicant(s) BUER ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 – 7, 9, 13 – 33, and 35 – 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 – 7, 9, 13 – 33, and 35 – 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/6/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the communication filed on 1/3/08.

All objections and rejections not set forth below have been withdrawn.

Claims 1 – 7, 9, 13 – 33, and 35 – 40 are pending.

Claims 8, 10 – 12, 34, and 41 – 53 are canceled.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations (or essentially similar recitations) of “wherein the first Ethernet packet also includes an outer Ethernet header and a manufacturer header”, “a manufacturer header”, “wherein the manufacturer header includes the memory address”, “a user-specific type field”, “wherein the outer Ethernet header comprises a user-specific type field”, and “generating a second Ethernet packet encapsulating the memory address and the first Ethernet packet”, as found recited within claims 1 – 7, 9, 13 – 16, 18, 26 – 33, 35, 36 and 38.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 7, 9, 13 – 16, 18, 26 – 33, 35, 36 and 38 are rejected under 35

U.S.C. 112, first paragraph, as failing to comply with the written description

requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 – 7, 9, 13 – 15, 18, 28 – 33, and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 – 7, 9, 13 – 15, 18, 28 – 33, and 38, they are rejected as being indefinite. The claim recitation of "...a manufacturer header..." lacks a defined

and customary meaning to those of ordinary skill in the art and the applicant's fail to define "a manufacturer header", thereby rendering the scope of these claims indeterminate. Furthermore, the claim recitation of "...a user-specific type field..." lacks a defined and customary meaning to those of ordinary skill in the art and the applicant's fail to define "a user-specific type field", thereby rendering the scope of these claims indeterminate. For the purpose of examination the examiner presumes the applicant to refer to another header and a type field.

Claim 7 recites "...wherein the second, third and fourth bytes of the manufacturer header..." in line 1. Applicant has no prior claim of "second, third, and fourth bytes" or of a header comprising "second, third, and fourth bytes". Thus, there is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner presumes the applicant to recite "...wherein second, third and fourth bytes of a manufacturer header...".

All depending claims to the above rejected claims are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 16, 17, 22 – 29, 31, and 35 – 40 are rejected under 35 U.S.C.

103(a) as being unpatentable over Bryers et al. (Bryers), U.S. Patent Publication 2003/0126233 in view of Mercer et al. (Mercer), “Method for Establishing a Security Association Between Two or More Computers Communicating Via an Interconnected Computer Network”, U.S. Patent Publication 2003/0018908.

Regarding claim 1, Bryers discloses:

receiving in a security processor a first Ethernet packet comprising a second Ethernet packet (fig. 10, 11, 15a, 16; par. 77, 114 – Herein, Bryers discloses a processing unit, such as a router, that performs security processing upon received Ethernet packets [i.e. *a first Ethernet packet comprising a second Ethernet packet*]);

Bryers discloses processing encapsulated ethernet packets according to security associations (fig. 10), however, Bryers does not appear to explicitly disclose that a packet comprises *a memory address associated with a security association, extracting the memory address, retrieving the security association from a memory using the received memory address*.

Mercer discloses that for the purpose of handling the requirements of high speed networks (par. 11), packets should comprise a memory address associated with a security association (par. 13). Furthermore, processing such packets includes

extracting the memory address and retrieving a corresponding security association from memory (fig. 7).

It would have been obvious to employ the improved packet handling and processing techniques of Mercer within the system of Bryers. This would have been obvious because one of ordinary skill in the art would have been motivated by the teachings of prior art that show such techniques improve security processing (Mercer, par. 11).

The combination enables:

and encrypting at least a portion of the extracted second Ethernet packet according to the retrieved security association (Bryers, fig. par. 193, 194, 198).

Regarding claim 37, it is rejected, at least, for the same reasons as claim 1, and furthermore because the combination enables a processing device for operating according to the Ethernet and IPSEC protocols and comprising *at least one data memory for storing at least one security association; at least one Gigabit MAC for receiving at least one second Ethernet packet* (Bryers, par. 199, fig. 4).

Regarding claims 2 – 4, 16, 25, and 38 the combination *enables an outer Ethernet header and a manufacturer header and wherein the manufacturer header comprises the memory address and wherein the outer Ethernet header comprises an Ethernet address of the security processor and wherein the extracting step comprises determining whether an Ethernet address from the at least one second Ethernet packet*

matches an Ethernet address of the security processor (Bryers, par. 120, 193; Mercer, par. 13).

Regarding claims 17, 26 – 29 and 31, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Regarding claims 22 – 24, the combination enables retrieving security associations and encryption (Bryers 120 – 124).

Regarding claims 13 – 15, the combination enables *wherein the retrieving step comprises retrieving the at least one security association from a data memory in a security processor and wherein the encrypting step comprises using an encryption key associated with the at least one security association and wherein the encrypting step comprises using an encryption algorithm defined by the at least one security association* (Bryers, par. 120, 121, 124).

Regarding claims 35 – 36, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Regarding claim 39, the combination enables, *wherein the at least one encryption processor comprises at least one IPSec processor* (Bryers, par. 120 – 124).

Regarding claims 40, the combination enables, an integrated circuit (Bryers, par. 23).

Claims 5 – 7, 9, 18 – 21, 30, 32 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bryers and Mercer in view of Stevens, TCP/IP Illustrated.

Regarding claim 5, the combination does not appear to explicitly disclose that Ethernet packets comprise user-specific type fields. Stevens discloses that composition of packets sent via Ethernet, the composition comprising user-specific type fields (Stevens, pg. 23, fig. 2.1). It would have been obvious to one of ordinary skill in the art to recognize the teachings of Stevens within the combination of Bryers and Mercer. This would have been obvious because one of ordinary skill in the art would have been motivated to follow the established standard required to employ Ethernet.

Regarding claims 6 and 7, the combination enables *wherein a first byte of the manufacturer header is set to zero, and wherein second, third and fourth bytes of the manufacturer header includes the memory address* (Stevens, pg. 22, 23).

Regarding claim 9, it is rejected, at least, for the same reasons as claims 5 – 8.

Regarding claims 18 – 21, they are rejected, at least, for the same reasons as claims 6 – 12.

Regarding claims 30, 32 – 33, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Response to Arguments

Applicant's arguments with respect to claims 1 – 7, 9, 13 – 33, and 35 – 40 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore Applicant's arguments filed 1/3/08 have been fully considered but they are not persuasive.

Applicant argues essentially that:

(i) *Bryers does not teach or suggest that the flow stage module generates an Ethernet packet having the handle or that the IPsec receives an Ethernet packet having the handle from the flow stage module.*

Thus, Bryers does not teach or suggest "receiving in a security processor a first Ethernet packet comprising a second Ethernet packet and a memory address associated with a security association," as recited in amended independent claim 1.

(Remarks, pg. 12)

Bryers also does not teach or suggest a method of or security processor for "generating encrypted packets by processing a first Ethernet packet comprising a second Ethernet packet and a memory address associated with a security association ... comprising ... extracting the memory address from the first Ethernet packet," as recited in amended independent claims 17 and 37. (Remarks, pg. 12)

Bryers further does not teach or suggest "generating a first Ethernet packet ... generating a second Ethernet packet encapsulating the memory address and the at least one first Ethernet packet," as recited in amended independent claim 26. (Remarks, pg. 12)

It is respectfully noted, in response to applicant's argument that the references fail to show certain features of applicant's invention, that the features upon which applicant relies (i.e., *the flow stage module generates an Ethernet packet having the handle or that the IPSec receives an Ethernet packet having the handle from the flow stage module*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, it is further noted that, while the applicant argues "*Bryers does not teach or suggest that the flow stage module generates an Ethernet packet ... Thus, Bryers does not teach or suggest "receiving in a security processor..."*", the examiner points out that

the prior art clearly discloses a security device, such as a router, that receives and processes the combination of an Ethernet packet and a memory address (the combination comprising an Ethernet packet) (Bryers, fig. 10, 11, 15a, 16; par. 77, 114; Mercer, par. 13).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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